1. (Amended) An apparatus capable of sensing pressure comprising:

a support structure; and

a sensor disposed on the support structure, the sensor including:

a ferromagnetic biasing layer;

a nonmagnetic conducting layer disposed on the ferromagnetic biasing layer; and

a magnetoresistive layer, wherein the magnetoresistive layer has non-zero magnetostriction such that a resistance of the magnetoresistive layer will change upon the application of pressure.

7. (Amended) An apparatus according to claim 6 wherein a width of the beam ranges from 1 microns to several microns.

17. (Amended) An apparatus according to claim 1 wherein a thickness of each of the ferromagnetic biasing layer, the nonmagnetic conductive layer and the magnetoresistive layer are within the range of 0.001μm – 0.5 μm.

21. (Amended) An apparatus capable of sensing pressure comprising:

a substrate; and

a plurality of sensor devices disposed on the substrate in an array, each of the sensor devices including:

a support structure; and

a sensor disposed on the support structure, the sensor including:

a ferromagnetic biasing layer;

a nonmagnetic conducting layer disposed on the ferromagnetic biasing layer; and

a magnetoresistive layer, wherein the magnetoresistive layer has non-zero magnetostriction such that a resistance of the magnetoresistive layer will change upon the application of pressure.

27. (Amended) An apparatus according to claim 26 wherein a width of each of the beams ranges from 1 microns to several microns.

37. (Amended) An apparatus according to claim 21 wherein a thickness of each ferromagnetic biasing layer, each nonmagnetic conductive layer and each the magnetoresistive layer is within the range of 0.001 micron – 5 micron.

41. (Amended) A method of sensing pressure in which applied pressure causes a change in a magnetization vector of a magnetoresistive layer within a device and a corresponding change in resistance comprising the steps of:

providing a sensing device with a sensor including plurality of layers, the plurality of layers comprising a non magnetic conducting layer disposed between a magnetoresistive layer with non-zero magnetostriction and a ferromagnetic biasing layer; and

sensing a resistance in the plurality of layers upon application of pressure to the sensing device, the applied pressure causing the magnetization vector of the magnetoresistive layer to change and thereby result in a change in resistance.

42. (Amended) A method according to claim 41 wherein the sensing device includes a plurality of sensors that are formed and operate as the one sensor such that during the step of sensing each sensor detects the pressure of an area associated with that sensor.

45. (Amended) A method according to claim 44 wherein the sensing device includes a plurality of sensors that are each formed and operate as the one sensor such that during the step of sensing each sensor detects the pressure of an area associated with that sensor.